Serial Number: _09/807,499_

CRF Processing Date: _____
Edited by: _____
Verified by: _____ (STIC staff)

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically: **ENTERED**

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____ .

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☐ Deleted extra, invalid, headings used by an applicant, specifically: _____

☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____ .

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other: _____
_____
_____
_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.   3/1/95

RAW SEQUENCE LISTING   DATE: 05/11/2001
PATENT APPLICATION: US/09/807,499   TIME: 13:34:33

Input Set : A:\Cpg.pto
Output Set: N:\CRF3\05112001\I807499.raw

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   4        Russo, Sebastian
   6 <120> TITLE OF INVENTION: Non-desensitizing AMPA-Receptors
   8 <130> FILE REFERENCE: D2234PCT
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/807,499
C--> 11 <141> CURRENT FILING DATE: 2001-04-13
  13 <150> PRIOR APPLICATION NUMBER: DE 198 47 064.9
  14 <151> PRIOR FILING DATE: 1998-10-13
  16 <160> NUMBER OF SEQ ID NOS: 22
  18 <170> SOFTWARE: PatentIn Ver. 2.1
  20 <210> SEQ ID NO: 1
  21 <211> LENGTH: 907
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  30              20                  25                  30
  32 Asn Gln Gln Ser Gln Glu His Ala Ala Phe Arg Phe Ala Leu Ser Gln
  33          35                  40                  45
  35 Leu Thr Glu Pro Pro Lys Leu Leu Pro Gln Ile Asp Ile Val Asn Ile
  36      50                  55                  60
  38 Ser Asp Ser Phe Glu Met Thr Tyr Arg Phe Cys Ser Gln Phe Ser Lys
  39  65                  70                  75                  80
  41 Gly Val Tyr Ala Ile Phe Gly Phe Tyr Glu Arg Arg Thr Val Asn Met
  42              85                  90                  95
  44 Leu Thr Ser Phe Cys Gly Ala Leu His Val Cys Phe Ile Thr Pro Ser
  45              100                 105                 110
  47 Phe Pro Val Asp Thr Ser Asn Gln Phe Val Leu Gln Leu Arg Pro Glu
  48          115                 120                 125
  50 Leu Gln Glu Ala Leu Ile Ser Ile Ile Asp His Tyr Lys Trp Gln Thr
  51      130                 135                 140
  53 Phe Val Tyr Ile Tyr Asp Ala Asp Arg Gly Leu Ser Val Leu Gln Arg
  54 145                 150                 155                 160
  56 Val Leu Asp Thr Ala Ala Glu Lys Asn Trp Gln Val Thr Ala Val Asn
  57              165                 170                 175
  59 Ile Leu Thr Thr Thr Glu Glu Gly Tyr Arg Met Leu Phe Gln Asp Leu
  60              180                 185                 190
  62 Glu Lys Lys Lys Glu Arg Leu Val Val Val Asp Cys Glu Ser Glu Arg
  63          195                 200                 205
  65 Leu Asn Ala Ile Leu Gly Gln Ile Val Lys Leu Glu Lys Asn Gly Ile
  66      210                 215                 220
  68 Gly Tyr His Tyr Ile Leu Ala Asn Leu Gly Phe Met Asp Ile Asp Leu
  69 225                 230                 235                 240
  71 Asn Lys Phe Lys Glu Ser Gly Ala Asn Val Thr Gly Phe Gln Leu Val
  72              245                 250                 255
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RAW SEQUENCE LISTING   DATE: 05/11/2001
PATENT APPLICATION: US/09/807,499   TIME: 13:34:33

Input Set : A:\Cpg.pto
Output Set: N:\CRF3\05112001\I807499.raw

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83 Gln Ser Leu Arg Arg Gln Arg Ile Asp Ile Ser Arg Arg Gly Asn Ala
84 305             310             315             320
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87          325             330             335
89 Ile Gln Arg Ala Leu Gln Gln Val Arg Phe Glu Gly Leu Thr Gly Asn
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92 Val Gln Phe Asn Glu Lys Gly Arg Arg Thr Asn Tyr Thr Leu His Val
93          355             360             365
95 Ile Glu Met Lys His Asp Gly Ile Arg Lys Ile Gly Tyr Trp Asn Glu
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98 Asp Asp Lys Phe Val Pro Ala Ala Thr Asp Ala Gln Ala Gly Gly Asp
99 385             390             395             400
101 Asn Ser Ser Val Gln Asn Arg Thr Tyr Ile Val Thr Thr Ile Leu Glu
102             405             410             415
104 Asp Pro Tyr Val Met Leu Lys Lys Asn Ala Asn Gln Phe Glu Gly Asn
105             420             425             430
107 Asp Arg Tyr Glu Gly Tyr Cys Val Glu Leu Ala Ala Glu Ile Ala Lys
108             435             440             445
110 His Val Gly Tyr Ser Tyr Arg Leu Glu Ile Val Ser Asp Gly Lys Tyr
111      450             455             460
113 Gly Ala Arg Asp Pro Asp Thr Lys Ala Trp Asn Gly Met Val Gly Glu
114 465             470             475             480
116 Leu Val Tyr Gly Arg Ala Asp Val Ala Val Ala Pro Leu Thr Ile Thr
117             485             490             495
119 Leu Val Arg Glu Glu Val Ile Asp Phe Ser Lys Pro Phe Met Ser Leu
120             500             505             510
122 Gly Ile Ser Ile Met Ile Lys Lys Pro Gln Lys Ser Lys Pro Gly Val
123             515             520             525
125 Phe Ser Phe Leu Asp Pro Leu Ala Tyr Glu Ile Trp Met Cys Ile Val
126      530             535             540
128 Phe Ala Tyr Ile Gly Val Ser Val Val Leu Phe Leu Val Ser Arg Phe
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131 Ser Pro Tyr Glu Trp His Ser Glu Glu Phe Glu Glu Gly Arg Asp Gln
132             565             570             575
134 Thr Thr Ser Asp Gln Ser Asn Glu Phe Gly Ile Phe Asn Ser Leu Trp
135             580             585             590
137 Phe Ser Leu Gly Ala Phe Met Gln Gln Gly Cys Asp Ile Ser Pro Arg
138             595             600             605
140 Ser Leu Ser Gly Arg Ile Val Gly Gly Val Trp Trp Phe Phe Thr Leu
141      610             615             620
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146 Glu Arg Met Val Ser Pro Ile Glu Ser Ala Glu Asp Leu Ala Lys Gln
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149 Thr Glu Ile Ala Tyr Gly Thr Leu Glu Ala Gly Ser Thr Lys Glu Phe
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153          675                  680                  685
155 Lys Ser Ala Glu Pro Ser Val Phe Val Arg Thr Thr Glu Glu Gly Met
156      690                  695                  700
158 Ile Arg Val Arg Lys Ser Lys Gly Lys Tyr Ala Tyr Leu Leu Glu Ser
159 705                  710                  715                  720
161 Thr Met Asn Glu Tyr Ile Glu Gln Arg Lys Pro Cys Asp Thr Met Lys
162                  725                  730                  735
164 Val Gly Gly Asn Leu Asp Ser Lys Gly Tyr Gly Ile Ala Thr Pro Lys
165                  740                  745                  750
167 Gly Ser Ala Leu Arg Asn Pro Val Asn Leu Ala Val Leu Lys Leu Asn
168          755                  760                  765
170 Glu Gln Gly Leu Leu Asp Lys Leu Lys Asn Lys Trp Trp Tyr Asp Lys
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173 Gly Glu Cys Gly Ser Gly Gly Gly Asp Ser Lys Asp Lys Thr Ser Ala
174 785                  790                  795                  800
176 Leu Ser Leu Ser Asn Val Ala Gly Val Phe Tyr Ile Leu Ile Gly Gly
177                  805                  810                  815
179 Leu Gly Leu Ala Met Leu Val Ala Leu Ile Glu Phe Cys Tyr Lys Ser
180                  820                  825                  830
182 Arg Ser Glu Ser Lys Arg Met Lys Gly Phe Cys Leu Ile Pro Gln Gln
183          835                  840                  845
185 Ser Ile Asn Glu Ala Ile Arg Thr Ser Thr Leu Pro Arg Asn Ser Gly
186      850                  855                  860
188 Ala Gly Ala Ser Gly Gly Gly Gly Ser Gly Glu Asn Gly Arg Val Val
189 865                  870                  875                  880
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208 Gly Leu Ile Phe Gly Val Ser Ser Asn Ser Ile Gln Ile Gly Gly Leu
209              20                  25                  30
211 Phe Pro Arg Gly Ala Asp Gln Glu Tyr Ser Ala Phe Arg Val Gly Met
212          35                  40                  45
214 Val Gln Phe Ser Thr Ser Glu Phe Arg Leu Thr Pro His Ile Asp Asn
215      50                  55                  60
217 Leu Glu Val Ala Asn Ser Phe Ala Val Thr Asn Ala Phe Cys Ser Gln
218 65                  70                  75                  80
220 Phe Ser Arg Gly Val Tyr Ala Ile Phe Gly Phe Tyr Asp Lys Lys Ser
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221                     85                    90                     95
223 Val Asn Thr Ile Thr Ser Phe Cys Gly Thr Leu His Val Ser Phe Ile
224                    100                   105                    110
226 Thr Pro Ser Phe Pro Thr Asp Gly Thr His Pro Phe Val Ile Gln Met
227             115                   120                    125
229 Arg Pro Asp Leu Lys Gly Ala Leu Leu Ser Leu Ile Glu Tyr Tyr Gln
230         130                   135                    140
232 Trp Asp Lys Phe Ala Tyr Leu Tyr Asp Ser Asp Arg Gly Leu Ser Thr
233 145                   150                   155                    160
235 Leu Gln Ala Val Leu Asp Ser Ala Ala Glu Lys Lys Trp Gln Val Thr
236                 165                   170                    175
238 Ala Ile Asn Val Gly Asn Ile Asn Asn Asp Lys Lys Asp Glu Thr Tyr
239                 180                   185                    190
241 Arg Ser Leu Phe Gln Asp Leu Glu Leu Lys Lys Glu Arg Arg Val Ile
242             195                   200                    205
244 Leu Asp Cys Glu Arg Asp Lys Val Asn Asp Ile Val Asp Gln Val Ile
245         210                   215                    220
247 Thr Ile Gly Lys His Val Lys Gly Tyr His Tyr Ile Ile Ala Asn Leu
248 225                   230                   235                    240
250 Gly Phe Thr Asp Gly Asp Leu Leu Lys Ile Gln Phe Gly Gly Ala Asn
251                 245                   250                    255
253 Val Ser Gly Phe Gln Ile Val Asp Tyr Asp Asp Ser Leu Val Ser Lys
254                 260                   265                    270
256 Phe Ile Glu Arg Trp Ser Thr Leu Glu Glu Lys Glu Tyr Pro Gly Ala
257             275                   280                    285
259 His Thr Ala Thr Ile Lys Tyr Thr Ser Ala Leu Thr Tyr Asp Ala Val
260         290                   295                    300
262 Gln Val Met Thr Glu Ala Phe Arg Asn Leu Arg Lys Gln Arg Ile Glu
263 305                   310                   315                    320
265 Ile Ser Arg Arg Gly Asn Ala Gly Asp Cys Leu Ala Asn Pro Ala Val
266                 325                   330                    335
268 Pro Trp Gly Gln Gly Val Glu Ile Glu Arg Ala Leu Lys Gln Val Gln
269             340                   345                    350
271 Val Glu Gly Leu Ser Gly Asn Ile Lys Phe Asp Gln Asn Gly Lys Arg
272         355                   360                    365
274 Ile Asn Tyr Thr Ile Asn Ile Met Glu Leu Lys Thr Asn Gly Pro Arg
275         370                   375                    380
277 Lys Ile Gly Tyr Trp Ser Glu Val Asp Lys Met Val Val Thr Leu Thr
278 385                   390                   395                    400
280 Glu Leu Pro Ser Gly Asn Asp Thr Ser Gly Leu Glu Asn Lys Thr Val
281             405                   410                    415
283 Val Val Thr Thr Ile Leu Glu Ser Pro Tyr Val Met Met Lys Lys Asn
284             420                   425                    430
286 His Glu Met Leu Glu Gly Asn Glu Arg Tyr Glu Gly Tyr Cys Val Asp
287         435                   440                    445
289 Leu Ala Ala Glu Ile Ala Lys His Cys Gly Phe Lys Tyr Lys Leu Thr
290         450                   455                    460
292 Ile Val Gly Asp Gly Lys Tyr Gly Ala Arg Asp Ala Asp Thr Lys Ile
293 465                   470                   475                    480
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295 Trp Asn Gly Met Val Gly Glu Leu Val Tyr Gly Lys Ala Asp Ile Ala
296             485             490                 495
298 Ile Ala Pro Leu Thr Ile Thr Leu Val Arg Glu Glu Val Ile Asp Phe
299             500             505                 510
301 Ser Lys Pro Phe Met Ser Leu Gly Ile Ser Ile Met Ile Lys Lys Pro
302             515             520             525
304 Gln Lys Ser Lys Pro Gly Val Phe Ser Phe Leu Asp Pro Leu Ala Tyr
305     530             535             540
307 Glu Ile Trp Met Cys Ile Val Phe Ala Tyr Ile Gly Val Ser Val Val
308 545             550             555                 560
310 Leu Phe Leu Val Ser Arg Phe Ser Pro Tyr Glu Trp His Thr Glu Glu
311             565             570                 575
313 Phe Glu Asp Gly Arg Glu Thr Gln Ser Ser Glu Ser Thr Asn Glu Phe
314             580             585             590
316 Gly Ile Phe Asn Ser Leu Trp Phe Ser Leu Gly Ala Phe Met Arg Gln
317     595             600             605
319 Gly Cys Asp Ile Ser Pro Arg Ser Leu Ser Gly Arg Ile Val Gly Gly
320     610             615             620
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323 625             630             635                 640
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326             645             650             655
328 Ala Glu Asp Leu Ser Lys Gln Thr Glu Ile Ala Tyr Gly Thr Leu Asp
329             660             665             670
331 Ser Gly Ser Thr Lys Glu Phe Phe Arg Arg Ser Lys Ile Ala Val Phe
332         675             680             685
334 Asp Lys Met Trp Thr Tyr Met Arg Ser Ala Glu Pro Ser Val Phe Val
335     690             695             700
337 Arg Thr Thr Ala Glu Gly Val Ala Arg Val Arg Lys Ser Lys Gly Lys
338 705             710             715                 720
340 Tyr Ala Tyr Leu Leu Glu Ser Thr Met Asn Glu Tyr Ile Glu Gln Arg
341             725             730             735
343 Lys Pro Cys Asp Thr Met Lys Val Gly Gly Asn Leu Asp Ser Lys Gly
344             740             745             750
346 Tyr Gly Ile Ala Thr Pro Lys Gly Ser Ser Leu Gly Asn Ala Val Asn
347     755             760             765
349 Leu Ala Val Leu Lys Leu Asn Glu Gln Gly Leu Leu Asp Lys Leu Lys
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352 Asn Lys Trp Trp Tyr Asp Lys Gly Glu Cys Gly Ser Gly Gly Gly Asp
353 785             790             795             800
355 Ser Lys Glu Lys Thr Ser Ala Leu Ser Leu Ser Asn Val Ala Gly Val
356             805             810             815
358 Phe Tyr Ile Leu Val Gly Gly Leu Gly Leu Ala Met Leu Val Ala Leu
359             820             825             830
361 Ile Glu Phe Cys Tyr Lys Ser Arg Ala Glu Ala Lys Arg Met Lys Val
362             835             840             845
364 Ala Lys Asn Pro Gln Asn Ile Asn Pro Ser Ser Ser Gln Asn Ser Gln
365     850             855             860
367 Asn Phe Ala Thr Tyr Lys Glu Gly Tyr Asn Val Tyr Gly Ile Glu Ser
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F.Y.I.

VERIFICATION SUMMARY   DATE: 05/11/2001
PATENT APPLICATION: **US/09/807,499**   TIME: 13:34:34

Input Set : **A:\Cpg.pto**
Output Set: **N:\CRF3\05112001\I807499.raw**

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
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L:1975 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
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L:2151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:2210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:2268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:2326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:2386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
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